

# Preliminary Product Information



## BVM-1300

### PROFESSIONAL COLOUR MONITOR

The BVM-1300 is a 13 inch (33 cm) professional colour monitor of outstanding performance and reliability.

#### FEATURES

High resolution Trinitron picture tube

Variable aperture correction

Vertical and horizontal sync delay for pulse cross display

Switchable fast/slow response of horizontal AFC scan circuitry

7 Segment LED on-air tally provides pre-set numeric designation of

picture source

Two composite coded video inputs, plus R,G,B inputs

Built-in cross hatch generator

#### SPECIFICATIONS

SYSTEM	625-line, 50 field	PICTURE PERFORMANCE
INPUTS PERFORMANCE		
Connectors	BNCs	Height 182 mm
r.g.b. inputs	0.7 Vp-p non-composite or 1 Vp-p composite video signal $\pm 6$ dB, loop through, high impedance.	Width 239 mm
Video		Underscan Approximately 10% reduction
Return loss	At least 46 dB to 5MHz.	Linearity Within a central area bounded by a circle whose diameter equals the picture height, within 1% of the picture height.
Maximum safe input DC	$\pm 5$ volts	Colour temperature 6500 degrees K, adjustable to other standards.
Hum rejection	Hum is at least 50 dB down and maximum hum is less than 4 Vrms, where hum is applied to the monitor in floating ground mode.	Normal chromaticity co-ordinates Red X 0.640 Y 0.349 Green 0.285 0.617 Blue 0.147 0.06
RGB PERFORMANCE		Convergence error Less than $\pm 1$ m within the central area.
Differential gain	Within 5% for a luminance from zero to 30 FL	Outside of the central area, less than $\pm 2$ mm
Differential phase	Within 5 degrees for a luminance from zero to 30 FL	Calibrated contrast 30 FL at peak white of standard 1 Vp-p signal.
Frequency response	100 Hz to 8 MHz $\pm 1$ dB	Raster size stability Less than 1% picture height, zero to 100 APL at 30 FL peak luminance.
DC restoration	Back porch type Back porch level within 1% of peak luminance from 10% to 90% APL	Scan delay
SYNCHRONIZATION		Horizontal delay Approximately 1/4 line
Interlace	More than 90%	Vertical delay Approximately one half field, vertical scan is expanded unless underscan is activated.
AFC Slow	Weighting factor is more than 5 from 2 Hz to 100 Hz.	Resolution Minimum 400 TV lines centre at 30 FL Luminance.
Fast	Weighting factor is less than:- 1 to 2 Hz 2 to 10 Hz 3 to 500 Hz 4 to 10 kHz	PAL/SECAM PERFORMANCE
Line pull range/ Line hold range	More than $\pm 500$ Hz at fast time constant	Luminance channel
Vertical retrace time		Differential gain Within 5% for a luminance from zero to 30 FL
Normal	Within 1 ms	Differential phase Within 5 degrees for a luminance from zero to 30 FL
Underscan	Within 0.8 ms	Frequency response Monochrome mode: 100 Hz to 6.5 MHz $\pm 1$ dB (aperture correction at zero) Colour mode Notch filter removes frequency in region of 4.43 MHz PAL, 4.406 MHz and 4.25 MHz SECAM.
Horizontal retrace time	Within 10 us	Chrominance channel (PAL) Demodulation axis U,V



Bandwidth	1.3 MHz (simple and delay modes)	GENERAL
Subcarrier regeneration	$\pm 1$ degree (standard input signal)	Power input
Chroma control range	More than $\pm 6$ dB Preset at zero dB	Power consumption
Chrominance channel (SECAM)		Operating ambient temperature
HF de-emphasis	Within $\pm 0.5$ dB of deviation curve, 3.9 - 4.75 MHz Drift of 4.286 MHz, within 20 kHz.	Satisfied specification operating temperature
HF limiting	More than 40 dB	Humidity
Linearity	Within 3% to $\pm 350$ kHz deviation at 4.406 MHz and 4.250 MHz	Altitude
Demodulator stability	Within $\pm 500$ Hz	Warm up time to meet specification
Bandwidth	1.3 MHz	Weight
Chroma control range	More than $\pm 6$ dB Preset at 0 dB	Dimensions
Chrominance/luminance		424 mm wide 276 mm height 454 mm depth (545 mm including power and remote cable connectors) Rack mounting kit available
Time error	Less than 30 ns	
Gain error	Less than 5%	
Aperture correction	A continuously adjustable front panel control provides up to 8 dB boost at 4.5 MHz	
DC restoration	Back porch type Back porch level within 1% of peak luminance from 10% to 90% APL.	Design and specification may be subject to change without notice

Design and specification may be subject to change without notice

Contact your local  
Sony Distributor  
or write to



**Sony Broadcast Ltd.**  
City Wall House  
Basing View, Basingstoke  
Hampshire RG21 2LA  
United Kingdom  
Telephone 0256 550111  
Telex 85 84 24